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PREFILED TESTIMONY

OF

BARBARA MALLETT

PUD 200300646

Application of Joyce E. Davidson, Director of the Public Utilities Division, Oklahoma Corporation Commission, to Initiate a Proceeding for the Implementation of the Federal Communications Commission's Triennial Review Order

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Q: Please state your name and business address.

A: My name is Barbara L. Mallett. My business address is the Jim Thorpe Office Building, Room 500, Oklahoma City, OK.

Q: Where are you employed and in what capacity?

A: I am employed by the Public Utility Division ("Staff") of the Oklahoma Corporation Commission ("OCC" or "Commission") as a Public Utility Regulatory Analyst.

Q: Have you testified previously before the Commission?

A: Yes, I have.

Q: Have your credentials been accepted by the Commission?

A: Yes.

Q: What is the purpose of Staff's testimony?

A: The purpose of this testimony is to make a recommendation on behalf of Staff in response to the Application filed by Joyce E. Davidson opening a proceeding to implement the Federal Communication Commission's ("FCC's") Triennial Review Order ("TRO"). Specifically, this testimony will address Staff's findings with regard to Track 2 – Batch Hot Cut ("BHC").

RECOMMENDATIONS

Q: What are your recommendations in this Cause?

A: Staff's makes the following recommendations.

- Staff recommends that this Commission find that it is obligated only to approve a Batch Hot Cut ("BHC") process within nine months of the effective date of the TRO, rather than approve and implement a BHC process within nine months.

- Staff recommends that this Commission find that absence of a batch cut process(es) would impair carriers in the absence of mass-market switching provided as a UNE.

- Staff recommends that this Commission find that an appropriate minimum number of loops contained in a batch is two.

- Staff recommends that the three BHC options proposed by SBC for its eleven-state region be approved and implemented by this Commission for use in all areas served by SBC, with the modifications listed below. Staff further recommends that a Cause or Causes be opened by the Commission to address the following matters.

  1- The first matter Staff will address involves testing and scalability. Staff recommends that the proposed system modifications be examined and tested by an independent third party under the Commission's oversight. This testing should be at SBC's expense and, in recognition of the fact that the OSS is a regional system, should be carried out to the extent possible in conjunction with the other states in the SBC region. Staff also recommends that SBC report Oklahoma-specific BHC-related data on a monthly basis in order to aid in determining appropriate Performance Measure ("PM") benchmarks.

  2- In the second matter, Staff recommends that the following issues not be included as a condition for approval of SBC's proposed BHC processes, but rather be pursued on a going forward basis in regional workshops. When consensus has been reached regarding how to include the following types of migration in the OSS, the Commission should open a cause to adopt resolved

issues and settle any outstanding problems relevant to Oklahoma's telecommunications carriers.

- CLEC-to-CLEC migration and cross-connects
- Line Splitting and Line Sharing
- Enhanced Extended Loops (EELs)

3- The third matter concerns SBC's current OSS and enhancements that SBC has proposed to implement in 2004. Staff recommends that these proposed enhancements be approved.

4- The fourth matter addresses CLEC concerns regarding additional support missing from SBC's current BHC process options and OSS support after the additional enhancements proposed by SBC.

- Staff recommends that SBC be ordered to continue to work with the CLECs who wish to use trap-and-trace in order to facilitate the process of implementation.
- With regard to the additional OSS Enhancements proposed by the CLEC's and Staff of the Texas Public Utility Commission, Mr. Nara Srinivasa, Staff agrees with Mr. Srinivasa's conclusions and recommends that the four issues be addressed via a series of regional collaborative workshops.

5- The fifth matter is the thirteen-day scheduling/provisioning interval. Staff recognizes that the thirteen-day interval proposed by SBC is an issue for the CLECs. Staff recommends that the PMs for BHC for new customers should be disaggregated from those for embedded base customers. Staff recommends that the possibilities for a more workable solution in context of new customers be discussed in the regional workshops where other such issues will be addressed.

6- The sixth matter involves CLEC access to SBC's GR 303 equipment to avoid having their IDLC loops moved to a copper pair or universal digital loop carrier. Staff recommends that SBC's GR 303 equipment not be made available to CLECs at this time. However, if and when solutions are found to

the unresolved problems noted above, Staff also recommends that this issue be revisited.

7- The seventh matter concerns the need for additional and revised PMs as a result of any changes made to the OSS. The existing PMs were developed in a series of regional collaborative workshops to allow all of the affected entities sufficient opportunity to review, consider, and discuss each proposed change and propose any others that may be needed in order to address CLEC concerns adequately. Staff recommends that any changes to the existing PMs should be made using the same process.

- Staff recommends that the Commission should contract with an independent third-party cost expert, at SBC's expense, to review the cost study and rates proposed by SBC.

GENERAL CONSIDERATIONS

Q: What obligations does the FCC place on the state commissions in the Triennial Review Order ("TRO")?

A: In the TRO, the FCC requires the following decisions and actions of the state commissions:

> State commissions must approve, within nine months of the effective date of this Order, a batch cut migration process to be implemented by incumbent LECs that will address the costs and timeliness of the hot cut process. Alternatively, state commissions must make detailed findings explaining why such a process is not necessary in a particular market, as described below. … Should a state commission fail to approve a batch cut migration process or provide a detailed explanation why such a process is not necessary within nine months of this Order's effective date, an aggrieved party will be permitted to initiate a proceeding with this Commission. (paragraph 488)

More specifically, 47 C.F.R. § 51.319(d)(2)(ii) requires the following:

> **Batch cut process.** In each of the markets that the state commission defines pursuant to paragraph (d)(2)(i) of this section, the state commission shall either establish an incumbent LEC batch cut process as set forth in paragraph (d)(2)(ii)(A) of this section or issue detailed findings explaining why such a batch process is unnecessary, as set forth in paragraph (d)(2)(ii)(B) of this section. A batch cut process is defined as a process by which the incumbent LEC simultaneously migrates two or more loops from one carrier's local circuit switch to another carrier's local circuit switch, giving rise to operational and economic efficiencies not available when migrating loops from one carrier's local circuit switch to another carrier's local circuit switch on a line-by-line basis.

> (A) A state commission shall establish an incumbent LEC batch cut process for use in migrating lines served by one carrier's local circuit switch to lines served by another carrier's local circuit switch in each of the markets the state commission has defined pursuant to paragraph (d)(2)(i) of this section. In establishing the incumbent LEC batch cut process:
>
> (1) A state commission shall first determine the appropriate volume of loops that should be included in the "batch."
>
> (2) A state commission shall adopt specific processes to be employed when performing a batch cut, taking into account the incumbent LEC's particular network design and cut over practices.
>
> (3) A state commission shall evaluate whether the incumbent LEC is capable of migrating multiple lines served using unbundled local circuit switching to switches operated by a carrier other than the incumbent LEC for any requesting telecommunications carrier in a timely manner, and may require that incumbent LECs comply with an average completion interval metric for provision of high volumes of loops.
>
> (4) A state commission shall adopt rates for the batch cut activities it approves in accordance with the Commission's pricing rules for unbundled network elements. These rates shall reflect the efficiencies associated with batched migration of loops to a requesting telecommunications carrier's switch, either through a reduced per-line rate or through volume discounts as appropriate.
>
> (B) If a state commission concludes that the absence of a batch cut migration process is not impairing requesting telecommunications carriers' ability to serve end users using DS0 loops in the mass market without access to local circuit switching on an unbundled basis, that conclusion will render the creation of such a process unnecessary. In such cases, the state commission shall issue detailed findings regarding the volume of unbundled loop migrations that could be expected if requesting telecommunications carriers were no longer entitled to local circuit switching on an unbundled basis, the ability of the incumbent LEC to meet that demand in a timely and efficient manner using its existing hot cut process, and the non-recurring costs associated with that hot cut process. The state commission further shall explain why these findings indicate that the absence of a batch cut process does not give rise to impairment in the market at issue.

Q: Please explain Staff's understanding of the time frame set out by the FCC for approval and implementation of a BHC process.

A: As was quoted above, the FCC stated in paragraph 488 of the TRO that the state commissions must approve a BHC process within nine months of the effective date of the TRO. That same paragraph continues to state that an aggrieved party may initiate a proceeding before the FCC if the state commission should fail to act as directed within nine months. However, at paragraph 460 of the TRO, the FCC states:

> … state commissions must, within nine months from the effective date of this Order, approve and implement a batch cut process that will render the hot cut process more efficient and reduce per-line hot cut costs.

Staff realizes that modifications of systems as complex as Southwestern Bell Telephone, LP d/b/a SBC Oklahoma's ("SBC") Operation Support System ("OSS") require considerable

time to implement and test. SBC's best estimate of its implementation date for the changes required of its OSS to provide a BHC process is mid to late July, 2004. This date assumes that SBC's proposed BHC process is approved unchanged, as any modifications of its proposed process will require even more time to effectuate. At best, implementation of SBC's proposed BHC process cannot be implemented until three weeks after the nine-month deadline of July 2, 2004.

Staff interprets the TRO as requiring that this Commission approve a BHC process within nine months of the effective date of the TRO, as stated in paragraph 488. The alternative would require state commissions to approve, and SBC to implement, whatever process SBC proposed, with no or only limited changes, prior to July 2, 2004. Because of the time required to implement a process as complex as the BHC processes proposed, the possibility of reviewing SBC's proposal and, in addition, requiring that changes to it be designed and implemented prior to the implementation date, would be nearly impossible. Staff believes that the FCC did not intend to limit the processes that can be considered to only those that can meet the deadline stated in the TRO. Therefore, Staff recommends that this Commission find that it is obligated only to approve a BHC process within nine months of the effective date of the TRO, July 2, 2004, rather than approve and implement a BHC process within nine months of that date.

Q. How does the FCC define the batch cut or batch hot cut?

A. At paragraph 423 of the TRO, the FCC defines BHC as:

> a seamless, low-cost process for transferring large volumes of mass market customers

At 47 C.F.R. §51.319(d)(2)(ii), the FCC continues that a batch cut process is:

> that process by which the ILEC simultaneously migrates two or more loops form one carrier's switch to another carrier's switch, "giving rise to operational and economic efficiencies" not available when loops are migrated on a line-by-line basis.

The physical process involves a manual "lift-and-lay" of a customer's loop to remove the connection from SBC's switch and establish a new connection to the CLEC's switch. SBC's current hot cut process is available for orders of up to twenty-four lines end-user address during normal business hours, 8:00 a.m. through 5:00 p.m. Monday through Friday excluding

holidays. SBC has also established a "project" offering to handle orders for more than twenty-four lines that terminate at one end-user address. The proposed BHC options are intended to enhance the current process and "project" offering to allow routine handling of larger volumes of conversions.

Q: The FCC's first requirement of a state commission is that it determine the appropriate volume of loops that should be included in the batch. What is Staff's recommendation regarding the appropriate volume of loops that should be included in a batch?

A: To the best of Staff's knowledge, this is a moot issue as no party in this proceeding has contested the issue and SBC has presented three options, each of which contain proposed loop counts that exceed the FCC's definition of at least two loops. Therefore, Staff recommends that this Commission find that an appropriate minimum number of loops contained in a batch is two.

Q: The FCC's second requirement of state commissions is that they adopt specific processes to be employed when performing a batch cut, taking into account the incumbent LEC's particular network design and cut-over practices. Please briefly explain SBC's proposed BHC process.

A: Staff's understanding of SBC's proposed BHC process is that it consists of three separate proposed processes: 1) the Enhanced Daily Process, 2) the Defined Batch Process, and 3) the Bulk Project Offering. In each of these proposed processes, the CLEC may choose between a Coordinated Hot Cut ("CHC") and a Frame Due Time ("FDT") option, depending upon which is most convenient for the CLEC. CHC involves manual coordination and communications between SBC and CLEC staff on the day of the hot cut, or "lift-and-lay", to facilitate and coordinate the cut-over. FDT, however, allows SBC and the CLEC to negotiate, or the CLEC to request, a time period during which the hot cuts will be accomplished. An FDT involves no real-time manual coordination between SBC and the CLEC; each separately performs whatever tasks are necessary to complete the cut-over on the date and within the agreed upon time frame.

Q: Please briefly describe the **Enhanced Daily Process** option proposed by SBC.

A: According to SBC's "11-State Final Batch Hot Cut Proposal", the Enhanced Daily Process is intended primarily to support CLEC acquisitions of new customers. SBC places no limit, beyond existing project limits, on the number of daily Local Service Requests ("LSRs") a CLEC may submit. This option supports changes in carriers using SBC's switch including:

1) UNE-P to UNE-L with Local Number Portability ("LNP") with a different CLEC,
2) Resale to UNE-L with LNP with a different CLEC, and
3) SBC Retail to UNE-L with LNP.

The provisioning interval available under the Enhance Daily Process is between two and five days. This option is available between 8:00 a.m. and 5:00 p.m. weekdays, excluding holidays. CLECs may choose between CHC and FDT options. Also, the Defined Batch Cut process allows a CLEC to schedule its batch cuts using a reservation tool that permits the CLEC to reserve time slots, and SBC will provide enhancement to its Provisioning Web Site ("PWS") that allows CLECs to track their hot cuts. Mechanized order flow-through is supported.

This option also supports Integrated Digital Loop Carrier ("IDLC") loops. IDLC is a technology that integrates the digital loop carrier system directly into a switch on a digital basis, typically at a DS1 level. Because IDLC loops are at the DS1 level and terminate directly on the switch, as opposed to terminating on the main distribution frame ("MDF"), SBC must move IDLC provisioned service to either copper loop or an unbundled IDLC ("UDLC") system to perform a hot cut. Once this is accomplished, the circuit has the appearance of the MDF, from which the hot cut can be made to the CLEC switch.

Q: Please briefly describe the **Defined Batch Cut** option proposed by SBC.

A: According to SBC's proposal, the Defined Batch Cut Process is intended to support migrations of an embedded base of resold and UNE-P mass-market loops to the CLEC's own switch. This option allows CLECs to use one service order to schedule up to 100 cut-overs at a central office ("CO"), with a 200-line maximum per CO per day. The following types of changes are supported.

Migrations of embedded base (same customer and carrier, different switch):

- UNE-P to UNE-L with LNP with the same CLEC, and
- Resale to UNE-L with LNP with the same CLEC,

New customer acquisitions:

- UNE-P to UNE-L with LNP with a different CLEC,
- Resale to UNE-L with LNP with a different CLEC, and
- SBC Retail to UNE-L with LNP.

IDLC loops can be included under this option. SBC states that a thirteen-day scheduling period is required to provision batch cuts under this option. The CHC option is available Monday through Friday from 8:a.m. through 5:00 p.m. and also Monday through Friday from 6:00 a.m. through 8:00 a.m. (minimum 25 lines and maximum 50 lines), and 5:00 p.m. through midnight (minimum 25 lines and maximum 100 lines). In addition, CHCs can be scheduled for Saturdays from 8:00 a.m. through 5:00 p.m. (minimum 50 lines and maximum 200 lines). All of these times exclude holidays. FDT can be scheduled for 8:00 a.m. through 5:00 p.m. Monday through Friday and 6:00 a.m. through 8:00 a.m. Monday through Friday (minimum 25 lines and maximum 50 lines). These times also exclude holidays. IDLC loops must be cut-over during normal work hours, 8:00 a.m. through 5:00 p.m. SBC estimates that it can accommodate 20 hot cuts per hour during normal business hours and twenty-five per hour out-of-hours (not between 8:00 a.m. and 5:00 p.m.). The Defined Batch Cut process allows CLECs to use one service order to schedule up to 100 lines at a single CO, whereas the Enhanced Daily process requires a service order for each customer location. Also, the Defined Batch Cut process allows a CLEC to schedule its batch cuts using a reservation tool that permits the CLEC to reserve time slots, and SBC will provide enhancements to its PWS that allow CLECs to track their hot cuts. Mechanized order flow-through is supported.

The Defined Batch Process is CO-based in that it allows a CLEC the ability to schedule multiple CO conversions on a single day. SBC claims that it will be able to migrate sufficient volumes to convert its entire embedded base within 27 months, thereby fulfilling the TRO's requirement.

Q: Please briefly describe the **Bulk Project** option proposed by SBC.

A: According to SBC's proposal, the Bulk Project option is intended to support the scheduling of large volumes of CLEC hot cuts for either embedded base customers or newly acquired customers. Bulk Project requires a minimum of 20 lines, and offers either the CHC or FDT option. This option allows a CLEC to schedule more than 100 CHCs in a single day, at a single or multiple COs. Enterprise customers may be scheduled along with other types of conversions under this option. SBC plans to add EELs to this option at a later date. Off-hours scheduling is available under this option beyond those hours mentioned for the Defined Batch Process, excluding Sundays. New acquisitions who are either mass-market end-users subscribing to voice service as an SBC retail customer or as another CLEC's resale or UNE-P customer may be transitioned using this option. The Bulk Project may also be used to migrate a CLEC's embedded base of resale and UNE-P mass market customers and enterprise DS0 customers. IDLC loops may be cut-over using this option during normal business hours (8:00 a.m. through 5:00 p.m. Monday through Friday). Any combination of these cut-overs may be included in a batch. The scheduling/provisioning period under this option is negotiated by the parties.

Q: Approximately how many lines comprise SBC's embedded base, and would need to be migrated to another switch if switching were no longer available as a UNE from SBC?

A: According to SBC witness Carol Chapman, SBC's embedded base consists of roughly 75,000 UNE-P lines with no more than 5,000 lines of embedded base in any CO. Ms. Chapman states that about ninety-five percent of SBC's 200 COs have fewer than 2,000 UNE-P lines.

Q: What is the FCC's timeline for migrating an ILEC's embedded base?

A: The FCC requires that the ILECs move at least one-third of their unbundled switching end-users to a non-ILEC switch within thirteen months. The next one-third must be migrated within the next seven months. The final one-third must be transitioned within another seven months. The total time for transitioning SBC's embedded UNE-P base is twenty-seven months.

Q: Would the proposed three options be sufficient to migrate SBC's embedded base if this Commission finds that CLECs are not impaired in the absence of switching as a UNE?

A: In the opinion of SBC Staff witness Carol Chapman and other SBC witnesses, the proposed options would suffice. However, none of the options have been tested at commercial volumes.

Q: Would implementation of SBC's three proposed BHC options achieve the operational efficiencies required by the FCC in the TRO?

A: In Staff's opinion, the three options represent an improvement in operational efficiency over the existing hot cut process offered by SBC. The proposed processes are specifically intended to support large volume cut-overs, whereas the current hot cut process is not. Approval of the three options and implementation of each would serve to mitigate the operational impairment issues associated with loop migrations. However, some issues will still exist.

Q: In Staff's view, what are the remaining primary issues with respect to BHC processes if this Commission approves SBC's current BHC proposal?

A: It is important to note that SBC offers support for hot cuts today. The name is taken from the type of operation that is performed as the end-user's loop is "cut" from one switch to another while it is "hot," or in service. In Staff's opinion, the primary issues remaining with regard to SBC's proposed BHC processes involve scalability of the processes to the commercial volumes required if switching is no longer required as a UNE and testing of the processes at those volumes, tracking of the processes by CLECs, which types of service (voice only, split or shared loops, EELs, cross-connects, CLEC-to-CLEC migration) should be included in the processes, additional enhancements SBC proposes to enhance its BHC process options and PWS, additional enhancements needed to address CLEC concerns, the problematic nature of the thirteen-day provisioning interval proposed in the Defined Batch Cut option, unbundled IDLC loops, and development/revision and acceptance of PMs to track SBC's performance using the new processes.

Q: What is Staff's recommendation regarding SBC's proposed BHC process?

A: In Staff's opinion, the proposed BHC process options represent an improvement over current hot cut offerings. Staff recommends that the three BHC options proposed by SBC for its eleven-state region be approved by this Commission, with the modifications discussed below, and implemented in Oklahoma.

SCALABILITY AND TESTING

Q: Please describe the additional issues Staff proposes be addressed.

A: The first is scalability and testing of SBC's proposed BHC process options. SBC's Direct Joint Testimony and that of SBC witness Carol Chapman and others have affirmed their confidence that the processes are capable of migrating multiple lines served using unbundled switching to switches operated by other carriers in a timely manner, and are adequate to meet increases in demand for the BHC process in the future. They also stated that SBC has conducted in-house evaluation of its processes, but SBC has not formally presented a detailed description of its methodology and results to either Staff or the CLECs. The system changes proposed in this Cause are significant, both in terms of their potential to disrupt the functioning of the OSS and to impact the CLEC's service provision. Staff recommends that the proposed system modifications be examined and tested by an independent third party under the Commission's oversight. This testing should be at SBC's expense and, in recognition of the fact that the OSS is a regional system, should be carried out in conjunction with the other states in the SBC region. Texas PUC Staff has also proposed regional testing of the proposed modifications to SBC's OSS as a project. As such, the other regional states may participate in the testing at their option. Staff also recommends that SBC report Oklahoma-specific BHC-related data on a monthly basis in order to aid in determining appropriate PM benchmarks.

WHAT TYPES OF MIGRATIONS SHOULD BE INCLUDED IN THE BHC PROCESS OPTIONS

Q: What is the second remaining issue?

A: The second issue is whether or not to include CLEC-to-CLEC migrations, cross-connects, split or shared line migrations, and EEL migrations, in the process(es) approved by the Commission in this Cause. In her testimony, SBC witness Carol Chapman states

"SBC Oklahoma's proposal addresses basic POTS migrations for mass market customers (and enterprise customers in some instances) currently served over an SBC Oklahoma switch to service provided by a CLEC switch over a stand-alone voice grade loop." Staff believes this to be appropriate. The FCC stated at paragraph 459 of the TRO:

> The record demonstrates that customers for mass market services are different from customers in the enterprise market. The mass market for local services consists primarily of consumers of analog "plain old telephone service" or "POTS" that purchase only a limited number of POTS lines and can only economically be served via analog DS0 loops. We find on a national basis, that competing carriers are impaired without access to unbundled local circuit switching for mass market customers.

However, these outstanding issues represent major concerns for several of the CLECs and should be addressed. As CLECs move from UNE-P to UNE-L, the need to offer more bundled offerings, for example bundled voice and data service, and reduce reliance on collocation make future enhancements to SBC's regional OSS critical. Such enhancements must be considered regardless of the Commission's findings in this proceeding. Staff recommends that the following issues be pursued on a going forward basis in regional workshops. When consensus has been reached regarding how to include the following types of migration in the OSS, the Commission should open a cause to adopt resolved issues and settle any outstanding problems relevant to Oklahoma's telecommunications carriers. Staff has informally approached staff in three of the four other regional state commissions. They indicated that they agree a regional approach is most appropriate for resolving these issues, and plan to encourage their commissions to participate in a regional solution.

- **<u>CLEC-to-CLEC migration and cross-connections</u>**

  CLEC-to-CLEC migration and cross-connections are clearly a concern of the FCC, although they were not the bases for its impairment findings. To quote paragraph 511 of the TRO:

  > 511. As discussed above, state commissions should examine the role of potential operational barriers in determining whether to find "no impairment." In particular, state commissions should examine whether incumbent LEC performance in provisioning loops, difficulties in obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC, and difficulties in obtaining cross-connects in an incumbent's wire center, are making entry uneconomic for competitive LECs. As described above, we find that these factors can raise barriers to entry, but they are not the bases for our national finding of impairment.

Paragraph 514 of the TRO states:

> *Competitive LEC – to – Competitive LEC Cross Connects*. We have also determined that an incumbent LEC's failure to provide cross-connections between the facilities of two competitive LECs on a timely basis can result in impairment. Therefore, a state commission considering whether to find "no impairment" with regard to mass market switching must evaluate whether such delays increase requesting carriers' costs to such a degree that entry into the market is rendered uneconomic in the absence of unbundled switching. Evidence relevant to this inquiry would include, for example, information regarding the incumbent's practices and procedures with regard to provision of cross-connects linking competitive carriers' facilities, competitive LECs' complaints regarding the incumbent's past performance in this area, the incumbent LEC's response to these complaints, the costs incurred in connection with deficient performance in this regard, and the degree to which those costs render entry into a given market uneconomic.

SBC did not address CLEC-to-CLEC migration or cross-connects in its proposed BHC process options, however, the company is attempting to assist the CLECs in addressing the issues. In her testimony, SBC witness Carol Chapman made the following statements:

> … SBC has been working with CLECs to develop consistent CLEC-to-CLEC migration processes for both SBC and CLECs to follow not only in Oklahoma but in all of the SBC states. …
>
> The single most important reason [that CLEC-to-CLEC migrations were not included in the proposed BHC options] is that such migrations involve essential CLEC-to-CLEC communications, which are not part of the normal hot cut process and which therefore, by definition, cannot be part of the standard batch cut process.

As its name implies, this type of migration involves the transfer of a loop from the switch of one CLEC to the switch of the "winning" CLEC. The required communication and coordination to effect a successful migration must occur between the two CLECs. As Ms. Chapman asserts, "this interaction between the two CLECs is not within SBC Oklahoma's control, and is not (and cannot reasonably be) accounted for in SBC Oklahoma's proposed batch processes." Ms. Chapman further stated that this issue is being addressed in a CLEC-to-CLEC migration forum. Further, as AT&T Witness Mark Van De Water pointed out in his testimony, as the mass market matures, migrations between CLECs are likely to occur frequently and become common. SBC will continue to be involved as the owner of the loop.

Because this issue was not the basis for the FCC's national impairment finding, and because it is being addressed in the CLEC-to-CLEC migration forum, Staff recommends that these migrations not be included as a condition for approval of SBC's proposed BHC processes, but rather be considered in a separate proceeding. Texas PUC Staff have recommended that a workshop be held to address these and other issues. Staff believes that a workshop is an appropriate forum to investigate the processes involved as well as obligations of SBC and the CLECs with respect to cross-connects and CLEC-to-CLEC migrations. In recognition of the fundamental regional nature of SBC's OSS and procedures, Staff recommends that either Oklahoma should host its own regional workshop, or Staff should participate in the Texas workshop.

- **Line Sharing and Line Splitting**

During a series of workshops regarding SBC's proposed BHC process options, AT&T, Covad, MCI, Sage, Talk America, Z-Tel, and others expressed their opinion that loops with Line Sharing and Line Splitting should be included in SBC's proposed BHC process options. Line sharing occurs when a data carrier provides digital subscriber line ("DSL") service over the same copper loop that SBC uses to provide retail local voice service. The data carrier uses the high frequency of portion of the loop and SBC uses the low frequency portion. Line splitting occurs when two CLECs use a single unbundled DSL loop provided by SBC to provide both voice service and DSL to a single end-user customer on that same loop. In this arrangement, one CLEC provides voice service and the same or another CLEC provides DSL-based data service. There are two basic types of line splitting arrangements contemplated under 47 C.F.R. § 319(a)(1)(ii)(A). First, the voice CLEC in a line splitting arrangement may use its own switch to provide the end user's voice service ("CLEC-Switched Line Splitting"). Second, where available, the voice CLEC in a line splitting arrangement may use unbundled local switching with shared transport ("ULS-ST") provided by SBC ("UNE Line Splitting"). 47 C.F.R. § 319(a)(1)(ii) addresses line splitting as follows:

> (ii) Line splitting. An incumbent LEC shall provide a requesting telecommunications carrier that obtains an unbundled copper loop from the

> incumbent LEC with the ability to engage in line splitting arrangements with another competitive LEC using a splitter collocated at the central office where the loop terminates into a distribution frame or its equivalent. Line splitting is the process in which one competitive LEC provides narrowband voice service over the low frequency portion of a copper loop and a second competitive LEC provides digital subscriber line service over the high frequency portion of that same loop.
>
> (A) An incumbent LEC's obligation, under paragraph (a)(1)(ii) of this section, to provide a requesting telecommunications carrier with the ability to engage in line splitting applies regardless of whether the carrier providing voice service provides its own switching or obtains local circuit switching as an unbundled network element pursuant to paragraph (d) of this section.
>
> (B) An incumbent LEC must make all necessary network modifications, including providing nondiscriminatory access to operations support systems necessary for pre-ordering, ordering, provisioning, maintenance and repair, and billing for loops used in line splitting arrangements.

Staff researched the TRO and could not identify specific obligations placed upon the states by the FCC. Therefore, Staff recommends that inclusion of line split and line shared loops not be considered in the Commission's decision regarding SBC's proposed BHC process options. However, because the issue is of importance to several CLECs, Staff recommends that this issue be considered in a separate proceeding. Staff believes that a workshop is an appropriate venue to address this issue. In recognition of the fundamental regional nature of SBC's OSS and procedures, Staff recommends that either Oklahoma should host its own regional workshop, or Staff of this Commission should participate in a regional workshop of another SBC Region state. Texas PUC Staff has recommended that this issue be addressed as a project (workshop).

- **Enhanced Extended Loops ("EELs")**

SBC did not include support of EELs in its proposed BHC process options, however it has stated that it is willing to consider such migrations as an enhancement to the bulk project option after the initial roll-out. provided the overall efficiency of the three offerings is not reduced. SBC witness Carol Chapman stated in her testimony that SBC did not include EEL support because the current BHC proposals could not be easily modified to address EELs and SBC did not want to jeopardize the effectiveness or efficiency of the proposed

processes by attempting to incorporate a new process for EELs prior to roll-out of the three proposed options.

Staff researched the TRO and was unable to locate any specific requirements placed on the state commissions regarding EELs. Staff recommends that these migrations not be included as a condition for approval of SBC's proposed BHC processes, but, rather, be considered in a separate proceeding. Texas Staff have recommended that a workshop be held to address this and other issues. Staff believes that a workshop is an appropriate forum to investigate the processes involved and obligations of SBC and the CLECs with respect to cross-connects and CLEC-to-CLEC migrations. In recognition of the fundamental regional nature of SBC's OSS and procedures, Staff recommends that either Oklahoma should host its own regional workshop, or Staff of this Commission should participate in the Texas workshop.

ADDITIONAL ENHANCEMENTS TO SBC'S OSS PROPOSED BY SBC

Q: What is the third issue?

A: The third set of issues concerns SBC's current OSS and enhancements that SBC has proposed to implement in 2004.

Q: Would you please provide a brief description of SBC's current OSS functions?

A: Yes. SBC's OSS consists of a computer system (hardware and software), databases, and interfaces owned and maintained primarily by SBC. One of its purposes is to enable a CLEC to access SBC's legacy systems in support of their own operations. The OSS supports pre-ordering, ordering, provisioning, maintenance, and billing functions related to provision of telecommunications services through resale, UNE, and interconnection. While the hot cut itself is a manual activity at this time, SBC's OSS is required to support the placing, provisioning and billing of a CLEC's BHC order. SBC has made two "gateways" into its OSS available to CLECs. Electronic Data Interface ("EDI") is an industry standard interface with application-to-application capability. LEX is a graphic user interface ("GUI") created by SBC for use by smaller CLECs who do lack the ability, or choose not to, to build their

own interface with SBC's OSS. I will provide a short description of the pre-ordering and ordering portions of the OSS.

- **Pre-ordering**

  During pre-order a CLEC obtains information it will need to support its service order. This includes such information as due date availability, customer address, telephone number, customer service record, feature availability, primary interexchange carrier ("PIC") identifier, loop makeup information, etc. The CLEC electronically submits queries through EDI or LEX to access the required pre-ordering data.

- **Ordering**

  After obtaining the required pre-ordering information, the CLEC submits its local service request ("LSR") electronically through either EDI or LEX. The ordering portion of SBC's OSS then processes the LSR , generates provisioning orders, and notifies the CLEC of the date of provisioning with a Firm Order Confirmation ("FOC"). After completing the order, SBC's OSS electronically generates and sends the service order completion notice ("SOC") to the CLEC, and concurrently sends update information to backoffice systems such as billing, 9-1-1, and maintenance databases. If the order cannot be provisioned on the requested date, SBC electronically provides the CLEC a jeopardy notice also via EDI or LEX.

  If an LSR is processed from entry to distribution electronically using SBC's OSS, without any manual intervention, it is said to have flowed-through. Orders that do not flow-through electronically are handled manually by SBC staff in the local service center and the local operations center. It is Staff's understanding that orders for large quantities of UNE loops placed through a single LSR are currently handled manually.

Q: What enhancements has SBC already made to its OSS?

A: As of December 13, 2003, SBC has enhanced to its ordering systems to handle CHC and FDT orders for converting loop migrations for same-CLEC or CLEC-to-CLEC for UNE-P to UNE-L with and without local number portability ("LNP") and stand alone LNP.

It has also made a CLEC-specific web-based provisioning web site to allow CLECs to manage their CHCs and FDTs. According to SBC's Joint Testimony, the PWS is available in Oklahoma today, is updated periodically throughout the day, and provides two reports: the *Frame Due Time Orders* report and the *Coordinated Hot Cut Orders* report. The site may be used to search for orders using a variety of identifiers, download either of the reports to an Excel spreadsheet, and navigate the search results data. SBC's Joint Witnesses state that CLECs are able to check the status of their scheduled CHC and FDT orders via the PWS. The scheduled due dates and times are posted to the PSW for individual CLECs no later than three days prior to the due date. Orders are designated as "open" until they have been screened by the LOC for accuracy and facility availability. Once the screening process is complete, the PWS is updated to designate the order as "confirmed."

Q: What additional enhancements does SBC propose to its OSS to accommodate the BHC process options?

A: SBC has proposed two pre-ordering modifications to accommodate the BCH options.

- SBC states that it will implement a transaction to allow the CLEC to validate the existence of IDLC facilities, and to reserve central office/Local Operations Center cut capacity for the proposed BHC processes.
- SBC also plans to update EDI, CORBA and Verigate interfaces for pre-ordering OSS changes made to enhance the BHC offering. CLEC's will not be required to make any coding changes to access the updates of the GUIs (Verigate and LEX). However, to use the modifications to the application-to-application interfaces (EDI/CORBA) must make appropriate changes to their pre-ordering and ordering OSS interfaces.

It has also proposed two ordering changes.

- SBC proposes to enhance the LSR electronic order flow process with business rule changes to support the proposed enhancements to the BHC process. Both EDI and

LEX will be updated for ordering OSS changes made to enhance the BHC process. CLEC's will not be required to make any coding changes to access the updates of the GUIs (Verigate and LEX). However, to use the modifications to the application-to-application interfaces (EDI/CORBA), CLECs must make appropriate changes to their pre-ordering and ordering OSS interfaces. As SBC has proposed the modification, within twenty-four hours of making a cut reservation, the CLEC must provide the reservation number on a valid Local Service Request for the telephone numbers.

- To support the above changes, SBC proposes to design additional validations to be performed at this state of the process by its edit engine ("LASR"). Examples of some of the expected new edits are valid number of lines per LSR, valid reservation number, new acquisition or embedded base, and presence of IDLC.

As was mentioned earlier, SBC has already created a provisioning web site, called the PWS, to allow CLECs to view the status and manage the current CHC and FDT orders. SBC proposes to further enhance the PWS to include support the ability to view the realtime results of the Dial Tone/Automatic Number Identification testing performed on the second day prior to the due date. This would make available to CLECs, in one location, the status of the order, order type (CHC or FDT), service order numbers, results (No Dial Tone or Tested OK). SBC commits to make these additional enhancements to its PWS available with its July 24, 2004 release. SBC requires CLECs to notify it of their final requirements on April 5, 2004.

Q: What is Staff's recommendation regarding this third set of issues?

A: Staff recommends that these proposed enhancements be approved.

ADDITIONAL ENHANCEMENTS TO SBC'S OSS PROPOSED BY CLECS AND STAFF OF THE TEXAS PUBLIC UTILITY COMMISSION

- **Trap-and-Trace**

Q: What is the fourth issue remaining?

A: Staff participated in a series of collaborative BHC workshops held at the Texas Public Utility Commission. During the collaborative workshops, SBC suggested that CLECs could capture "test call" information that they already receive in their switches when SBC performs a hot cut, and could use that information to eliminate the manual notification step that is currently performed by SBC on completion of a CHC. This process is known as "trap-and-trace" and would allow the CLEC to learn when the hot cut is complete and route that information to its operations personnel. The information could be used to send the appropriate LNP activation request for the new customer to the Number Portability Administration Center, for example. Staff recommends that SBC be ordered to continue to work with the CLECs who wish to use trap-and-trace in order to facilitate the process of implementation.

- **Additional OSS Enhancements**

Q: Are there other enhancements to SBC's proposed OSS and/or BHC process options that should be made available to the CLECs at roll-out of the processes?

A: Yes. In Staff's opinion there are. In his testimony before the Texas Public Utility Commission, Mr. Nara Srinivasa recommended several additional enhancements to address CLEC concerns. Staff believes that this Commission should also address these areas for two reasons. First, SBC's OSS provides region-wide support to CLEC operations. Therefore, any modifications implemented in one SBC Region state will result in the same modifications being used for all regional states. Second, Staff believes that the CLEC concerns are valid and should be addressed.

Q: Please describe each CLEC concern and the remedy proposed by Mr. Srinivasa.

A: Mr. Srinivasa recommended four additional enhancements. The first involves SBC's proposed Pre-ordering OSS. SBC proposes to enhance its pre-order systems (EDI, CORBA and its pre-order GUI, Verigate) to allow CLECs to look up the loops they need to migrate to verify whether they are or are not served by IDLC equipment. As proposed, the enhancement does not address whether a bulk request can be handled. If a loop to be migrated is IDLC type, it must be ordered during regular hours (8:00 a.m. through 5:00 p.m. Monday through Friday, excluding weekends). Mr. Srinivasa recommended that SBC should

modify its proposed enhancement to include the CLEC's bulk request for IDLC loop look-up query. If SBC is unable to make the suggested modification due to its current system limitations, he recommended that SBC modify its ordering systems to verify and inform the CLEC if any of the loops included in the batch are IDLC type, electronically reschedule the hot cut time for the IDLC loops, and process the rest of the LSR as requested. Implementation of this modification should address the CLECs' concerns by automating the look-up and rescheduling of IDLC loops for the entire batch, thereby reducing the time required for IDLC loop look-up by CLECs.

Mr. Srinivasa's second recommended enhancement concerns the need for CLEC staff to manually type the telephone numbers in pre-order for the Defined Batch in order to get a reservation number. SBC proposes to enhance its pre-order systems to allow CLECs to reserve and schedule the batch cut process for the Defined Batch process by viewing the available cut volume and time for each central office through pre-order query. It is Staff's understanding that the information must be manually typed into a GUI interface to reserve a date and time, then manually typed again into the application-to-application EDI interface to submit the LSR. Because the information must be manually transferred telephone number by telephone number under the proposed enhancement, the CLECs are concerned about the inefficiency of multiple entries and the likelihood of typing errors. Mr. Srinivasa recommended that SBC make the enhancement available through its application-to-application EDI as well as its GUI to reduce the CLECs' efforts in manually typing these numbers in the RS_IS field of the LSR by toggling between the GUI and the EDI interfaces. If that is not feasible or possible, he recommends that SBC should design its system to allow a CLEC to copy and paste the reservation numbers from the GUI screen to the EDI LSR.

Mr. Srinivasa's third recommendation concerns ordering. After studying Mr. Mark Van De Water's testimony on behalf of AT&T Communications of the Southwest, Inc., Mr. Srinivasa concluded that EDI 865 Service Order Completion Notices ("SOCs") are sent only after all the orders in the batch are completed. After studying page thirty-one of SBC's Joint Testimony, Staff agrees. In fact, the SBC testimony states "SOCs should not be used to determine a specific cut completion time." The timing of completion notice to the CLEC is important because the Number Portability Administration Center ("NPAC") must be notified

to activate LNP. Until LNP is activated, the end-user cannot terminate calls using the new switch. For CHC batch cuts, SBC will inform CLECs by phone when a cut is completed. However, for FDT batch cuts, SBC expects CLECs to use the trap-and-trace functionality of the CLEC's own switch. Mr. Srinivasa's and Staff's concern is that not all CLECs have the capability to use trap-and-trace. Further, from the opinions expressed in the regional BHC workshops held at the Texas Public Utility Commission, it appears that CLECs prefer that SBC handle the noticing of NPAC for activating the LNP. A preferred solution would be that SBC, as donor of the ported number, be allowed to electronically inform NPAC to initiate LNP immediately after completion of the hot cut, provided the NPAC Administrator is able to electronically receive the information. In its amicus brief, Neustar Inc. indicated that it is testing such an upgrade and expects that it will be operational within six to twelve months. As an interim solution, Mr. Srinivasa recommended that SBC modify its batch cut ordering process or LSR to allow a CLEC to specify whether or not it will use trap-and-trace. If it will not and it has chosen the FDT option, SBC should notify the CLEC by phone when the hot cut is completed and be allowed to recover any costs associated with this additional requirement.

Mr. Srinivasa's fourth recommendation addresses AT&T's concern that the specific definition of "real time notice", in context of the CLECs' use of SBC's PWS to view "real time" results of the dial tone and automatic number identification tests performed by SBC two days prior to the hot cut, is not clear in any of the documents provided to the CLECs. Ideally a benchmark for performance would be set. However, such a benchmark should be based on actual experience or independent test data, neither of which are available. Mr. Srinivasa recommended that an update interval of one minute be established until system testing is complete and additional data are available. Also, it is Staff's understanding that the PWS is a new tool. As such, its performance has yet to be captured in the Performance Measures ("PMs") used in the SBC Region. Such PMs must be developed.

Staff agrees with Mr. Srinivasa's conclusions and recommendations for resolution of these four issues. Because of the fundamental regional nature of SBC's OSS, any modification approved and implemented in one state must be considered by the other four states. All four of these recommended additional enhancements involve changes to the OSS.

This Commission must make a determination regarding whether or not it will support them. Staff recommends that it find the additional enhancements are reasonable and should be implemented in Oklahoma as well as Texas.

13-DAY SCHEDULING/PROVISIONING INTERVAL

Q: What is the fifth area Staff believes should be addressed by the Commission in this proceeding?

A: Staff recognizes that the thirteen-day scheduling/provisioning interval proposed by SBC is an issue for the CLECs. Staff agrees that an ILEC can transfer a UNE-P customer to its retail service faster than thirteen days and is aware that creates a competitive disadvantage for CLECs. Staff recommends that the PMs for BHC for new customers should be disaggregated from those for embedded base customers. Although the process of "rolling" UNE for new acquisitions may mitigate the parity issue, cost remains an issue. It is Staff's understanding that the CLEC would have to pay for both UNE switching and self-provisioned switching for a period of time. Staff recommends that the possibilities for a more workable solution in context of new customers be discussed in the regional workshops where other such issues will be addressed.

UNBUNDLED IDLC LOOPS

Q: What is Staff's recommendation regarding this issue?

A: As was explained in response to a prior question, IDLC loops are terminated at the switch rather than the main distribution frame. SBC proposes that IDLC loops be moved to cooper loop or a universal digital loop carrier. It is Staff's understanding that moving IDLC loops to either of these could result in degradation in speed and/or quality of data transmissions. However, it is also Staff's understanding that the quality of voice transmissions would be maintained. In their testimony on behalf of MCI, Ms. Sherry Lichtenberg and Mr. Michael Starkey proposed that IDLC loops should be unbundled and SBC's GR 303 equipment made directly accessible by CLECs. GR 303 refers to Telcordia's General Requirement 303, a set of specifications applicable to IDLC equipment. Discussion at the Texas Public Utility Commission workshops indicated that the GR 303 equipment is also problematic, however.

Staff understood from those discussions that the number of CLECs that could gain access to IDLC loops using this technology would be capped. It is also Staff's understanding from those discussions that issues of cost of the side ports, sharing of test resources, alarm reporting and provisioning remain unresolved and that these issues, if not resolved, could degrade both voice and data service quality. Staff recommends that SBC's GR 303 equipment not be made available to CLECs at this time. However, if and when solutions are found to the unresolved problems noted above, Staff also recommends that this issue be revisited.

REVISION OF EXISTING AND/OR DEVELOPMENT OF NEW PERFORMANCE MEASURES TO ACCOMMODATE THE PROPOSED BHC PROCESSES

Q: What is the last area Staff will discuss?

A: SBC has proposed three enhanced BHC options, proposed additional enhancements to those options, and Staff recommends that additional enhancements, beyond SBC's proposals, be made to SBC's OSS. To the extent that the Commission finds that SBC's OSS should be modified, Performance Measures must be revised and/or developed to track SBC's provision of the proposed BHC options. SBC witness, Mr. Randy Dysart, filed testimony proposing that some of the existing PMs related to the hot cut in version 3.0 of the PM business rules should be modified to accommodate the BHC process options proposed by SBC. In addition, MCI's witnesses, Ms. Lichtenberg and Mr. Starkey, have proposed a set of PMs related to SBC's OSS and the actual hot cuts.

It is Staff's opinion that the Parties to this proceeding have not had sufficient opportunity to properly consider and discuss the proposed business rules, benchmarks, exclusions, and penalty levels, and that the PMs proposed are not sufficient to address CLEC concerns regarding the proposed BHC Process options. Mr. Dysart proposes revising several existing PMs to accommodate the BHC Processes. However, he stops short of proposing new PMs to address OSS enhancements and edits proposed as part of the BHC Process. MCI's proposed PMs were presented on March 22, 2004. The time available to the Parties to address these proposed PMs is insufficient for proper consideration and discussion. In Staff's opinion, revision of the existing PMs should not be considered in this proceeding.

The existing PMs were developed in a series of regional collaborative workshops to allow all of the affected entities sufficient opportunity to review, consider, and discuss each proposed change and propose any others that may be needed in order to address CLEC concerns adequately. Staff recommends that any changes to the existing PMs should be made using the same process. Texas has proposed such a series of workshops, similar to the six-month PM review, to allow the PMs to be fully developed with due consideration to all parties' input.

Q: Staff's testimony thus far has not considered the possibility that absence of a BHC process would not impair requesting carriers' ability to serve end users using DS0 loops in the mass market without access to local circuit switching as a UNE. Is it Staff's recommendation that absence of a BHC process (es) would impair carriers?

A: Yes. Staff's testimony presupposes this recommendation for the following reasons.

1) No party to this Cause has suggested or presented evidence that absence of a BHC process(es) would not result in impairment.

2) SBC voluntarily submitted its BHC process proposal for consideration and approval.

3) The FCC made a national finding of impairment:

> We find, on a national basis, that competing carriers are impaired without unbundled local circuit switching when serving the mass market due to operational and economic barriers associated with the incumbent LEC hot cut process.

Q: What is Staff's recommendation with regard to the rates proposed by SBC for use of its three BHC processes?

A: Because of the complexity of the cost issues to be addressed, Staff recommends that the Commission contract with a cost expert, at SBC's expense, to review the cost study and rates proposed by SBC.

Q: Is there anything else you would like to bring to the attention of the court?

A: No.

Q: Does this conclude your testimony?

A: Yes, however, Staff reserves the right to supplement this testimony.